

CLAIMS

1. Catalytic composition for deodorizing or oxidizing  
5 purposes which comprises a coating of a coating  
material on a support and is obtainable by applying the  
coating material, comprising (1) a polycondensate of  
(A) one or more silanes of the general formula (I)

10  $R_a-Si-X_{(4-a)}$  (I)

15 in which the radicals R are identical or different  
and are non-hydrolysable groups, the radicals X  
are identical or different and are hydrolysable  
groups or hydroxyl groups and a has the value 0,  
1, 2 or 3, with a being greater than 0 for at  
least 50 mol% of the silanes, or an oligomer  
derived therefrom,

20 (B) if desired, one or more compounds of glass-forming  
elements,

25 and (2) particles of one or more transition metal  
oxides, the weight ratio of transition metal oxide  
particles to polycondensate being from 10:1 to 1:10, to  
the support and subjecting the applied coating material  
to thermal treatment.

30 2. Catalytic composition according to Claim 1,  
characterized in that a is greater than 0 for from 50  
to 95 mol% of the silanes.

35 3. Catalytic composition according to Claim 1 or 2,  
characterized in that the transition metal oxide is  
selected from the oxides of the metals La, Ce, Ti, Zr,  
V, Cr, Mo, W, Mn, Fe, Co, Ni, Cu, Ag and Zn or mixtures  
thereof.

4. Catalytic composition according to one of Claims 1  
to 3, characterized in that the particle diameter of

the transition metal oxide particles is from 10 nm to 20  $\mu$ m.

5. Catalytic composition according to one of Claims 1 to 4, characterized in that the thickness of the coating is from 0.01 to 500  $\mu$ m.

10 6. Catalytic composition according to one of Claims 1 to 5, characterized in that the support is composed of metal, metal oxide, glass, glass ceramic, ceramic or porous material.

15 7. Catalytic composition according to one of Claims 1 to 6, characterized in that the coating material, immediately or after drying, has been treated at an air temperature range from 200 to 700°C.

20 8. Catalytic composition according to one of Claims 1 to 7, characterized in that the coating material additionally includes inorganic particles.

9. Catalytic composition according to one of Claims 1 to 8, characterized in that the coating formed from the coating material is porous.

25 10. Process for preparing a catalytic composition for deodorizing or oxidizing purposes which comprises a coating of a coating material on a support, wherein (1) a polycondensate of  
30 (A) one or more silanes of the general formula (I)



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least 50 mol% of the silanes, or an oligomer derived therefrom, and

(B) if desired, one or more compounds of glass-forming elements

5 is mixed with (2) particles of one or more transition metal oxides in a weight ratio of transition metal oxide particles to polycondensate of from 10:1 to 1:10, a coating material comprising this mixture is applied to the support and, immediately or after drying, is  
10 subjected to heat treatment.

11. Use of the catalytic composition according to one of Claims 1 to 9 for deodorizing.

15 12. Use of the catalytic composition according to one of Claims 1 to 9 for oxidizing organic components or carbon.